

## Automated Export System Trade Interface Requirements (AESTIR)

### APPENDIX M: METRIC CONVERSIONS

*This appendix provides formulas to convert between  
inch-pound units and metric units.*

With the adoption by the United States of the Harmonized Tariff Schedule (HTS) and its use of metric units, there will be a natural shift to report quantities on invoices in metric units. Where a need to convert exists, the following metric conversion factors should be used. These factors have been taken from the Federal Standard 376A, a Government-wide standard developed through the Government's Interagency Committee on Metric Policy.

The following chart provides the multiplier to be used in converting from inch-pound units to metric units. Where there is a need to convert from metric units to inch-pound units, divide rather than multiply by the factor.

#### ***Metric Conversion***

<b>Quantity</b>	<b>From Inch-Pound Units</b>	<b>To Metric Units</b>	<b>Multiply By</b>
Mass	Ton (Long)	T (Metric Ton) (1T = 1,000 kg)	1.016047
	Ton (Short)	T (Metric Ton)	0.90718474
	Lb (Avdo)	Kg	0.45359237
	Oz (Troy)	G	31.10348
Length	Yd	M	0.9144
	Ft	M	0.3048
	In	Cm	2.54
	In	Mm	25.4
Area	Yd <sup>2</sup>	M <sup>2</sup>	0.8361274
	Ft <sup>2</sup>	M <sup>2</sup>	0.09290304
	In <sup>2</sup>	Cm <sup>2</sup>	6.4516
	In <sup>2</sup>	Mm <sup>2</sup>	645
Volume	Yd <sup>3</sup>	M <sup>3</sup>	0.7645549
	Bbl (oil) (42 Gallons)	M <sup>3</sup>	0.1589873
	Ft <sup>3</sup>	M <sup>3</sup>	0.02831685
	Ft <sup>3</sup>	L	28.31685
	Gal (Liq)	L	3.785412
	Quart (Liq)	L	0.9463529
	Pint (Liq)	L	0.4731765
	Fl Oz	MI	29.57353
	In <sup>3</sup>	Cm <sup>3</sup>	
	C/S (Formerly Cos. Cycles Per Second)	Hz	1.0
Force	Kip	kN	4.448222
<b>Quantity</b>	<b>From Inch-Pound Units</b>	<b>To Metric Units</b>	<b>Multiply By</b>

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Radioactivity	Curie	MBq (Bq-becquerel)	37000.
Stress	Lbl/ln2 (formerly PSI)	MPa	0.006894757
	Lbl/ln2 (formerly PSI)	KPa	6.894757
Power	Btu/S	kW	1.055056
	hp (electric)	kW	0.746
	Btu/H	W	0.2930711
Celsius	°F	°C	$t^{\circ}\text{C} = (t^{\circ}\text{F} - 32)/1.8$

*Note:* The following conversion procedure should be followed for beverages, spirits and vinegar classified in Chapter 22 of the *Harmonized Tariff Schedule of the United States Annotated* (HTS): Multiply the number of proof-liters by 0.264172 to obtain proof-gallons at 15.5°C (60F). For wine, multiply the number of proof-liters by 0.26417. This allows for the calculation of the U.S. excise tax.